

REMARKS

Reconsideration of the present application is respectfully requested. With entry of the amendments submitted in this paper, claims 1, 10-15, and 17-44 will be pending and under consideration. Claims 1, 10-15 and 17-43 are amended herein. Claim 44 is added. Claims 2-9 and 16 are canceled.

Claim 1 as amended herein finds support, for example, in canceled claims 2-9 and in the specification at page 7, lines 11-19, and in Example 1 at specification pages 11 and 12. As amended, it is believed that claim 35 is in condition of allowance, as it is indicated in the Office Action that claim 35 would be allowed if rewritten to include all limitations of the claims from which claim 35 depends. Claim 35 has been amended in accordance with this indication.

Claims 42 and 43 have been amended to conform the claimed subject matter to one of the patentable classes of invention identified in 35 U.S.C. § 101. Accordingly, this rejection, and the companion rejection under 35 U.S.C. § 112 paragraph 2, are believed to be traversed by the amendments to these claims.

Claim 36, as amended, is believed to traverse its rejection under 35 U.S.C. § 112 paragraph 2. Claim 44 has been added to recite the preferred condition previously recited alternatively in claim 36. Claim 36 has also been

amended to indicate that maceration of the powder takes place in an aqueous solution.

Among the amendments to claim 1 is an indication that eugenol, eugenol acetate, vanillin, carvacrol, and thymol are not contained in essential oils. Support for this amendment can be found, for example, in aforementioned Example 1 of the specification, in which dried plant material sources of the above ingredients are ground, and then the ground material is macerated in an aqueous solution to form an extract containing the claimed components.

Other amendments to the claims are obviously of merely a formal nature.

Claims 1-9 and 15-34 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Vail et al., U.S. Patent Pub. No. 2004/0009245 (“Vail”). Claims 1-16 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Meeker in view of Bacca et al. U.S. Patent No. 5,733,530 (“Bacca”) and Nabi et al. U.S. Patent No. 5,472,684 (“Nabi”). Claims 1-9 and 36-41 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Meeker in view of Thakare.

The Applicants submit that the above rejections are traversed. Vail and Meeker, the lead references supporting the section 103 rejections, each employ essential oils as the source of the components. This is in contrast the decontaminating composition recited in the present claims, in which the active

components, that is, eugenol, eugenol acetate, vanillin, carvacrol, and thymol **are not** contained in essential oils. Accordingly, the section 103 rejection based on Vail, and the section 103 rejections based on reference combinations including Meeker teach away from the claimed invention. The person of ordinary skill in the art, working at the time before the making of the present invention, would be led by Vail and/or Meeker to use essential oil sources of the active components. These teachings lead away from the invention as claimed. For these reasons, the rejections are traversed.

There are several advantages realized by the claimed decontaminating composition that are not realized by the compositions taught by Vail and Meeker, due to the avoidance of essential oil sources in the claimed composition. Essential oils lack stability, are non-edible, and are often toxic, and irritate the skin. Essential oils are often ineffective, particularly when mixed with water, where the lack of miscibility means that the oils will float on the water surface. This severely limits the bactericidal effect, if any, of such essential oil-containing compositions.

It also should be noted that claim 36, describing a method by which the decontaminating composition of claim 1 is made, indicates that maceration takes place in an aqueous solution. This is notable because it is expected that water-soluble components are extracted during maceration. This is in contrast to the

oil based substances expected to be extracted and contained in the essential oil compositions disclosed in Vail and Meeker. As a matter of the patentability analysis, it would be expected that the method of claim 36, in which maceration takes place in a aqueous solution, leads to a different composition when compared to the compositions of Vail and Meeker.

For additional reasons, the rejection based on Vail is not believed to be sustainable. Vail discloses an inhaler containing an essential oil, the vapors of which are inhaled to treat an infectious disease such as SARS. Vail is primarily concerned with using eucalyptus oil and tea tree oil as the essential oil, and in paragraph 79, page 7, indicates that the mixture could be “any mixture of essential oils” from the list provided at paragraphs 203 to 329 of the Vail disclosure. Whether any of the components of the claimed invention are disclosed in those paragraphs is irrelevant, since not only would that disclosure be disqualified by virtue of being directed to essential oils, the fact is that 126 essential oils are listed in those paragraphs. Beyond that disclosure, Vail provides no guidance to the person of ordinary skill in the art that would lead him or her to arrive at the claimed composition. In fact, working at a time before the making of the present invention, it would have been virtually impossible to arrive at the claimed invention, in view of the broad and vast disclosure of Vail. It is respectfully submitted that the sole basis for the rejection

based on Vail is hindsight, which is impermissible. Furthermore, Vail is predominantly directed to the alleged effectiveness of eucalyptus oil and tea tree oil. These components are not present in the claimed subject matter. Thus, the compositions taught by Vail are substantially different from what is presently claimed, and Vail teaches away from the claimed invention.

Furthermore, the composition of Vail is disclosed only as having virucidal properties. There is no disclosure of the Vail composition having bactericidal and fungicidal properties. This is yet another deficiency with the rejection based on Vail.

The rejections based on Meeker in view of Bacca and Nabi, and Meeker in view of Thakare, are traversed, for as noted above, the components disclosed in the Meeker's dental compositions are in essential oil form.

Meeker surveys the use of essential oils in dentistry, such as eugenol-containing clove oil. Meeker indicates that clove oil contains eugenol in a predominant proportion and vanillin in a minor proportion. While Meeker reports that combinations of (1) eugenol and thymol and (2) eugenol and carvacrol were tested, the proportions at which they were tested differ significantly from the proportions in which they are present in the claimed invention. Notably, none of the combinations (1) and (2) included additional relevant components, namely vanillin and eugenol acetate. Also, Meeker

teaches away from the claimed invention. Meeker teaches that thymol is the most active of the relevant components, suggesting that thymol should be included as the predominant component of the composition. In contrast, thymol is present in the claimed composition in a minor proportion. Furthermore, nothing in combinations of references including Meeker suggest the specific proportions of the components cited in the present claims.

Bacca and Nabi are cited in combination with Meeker. Nabi shows oral compositions for plaque and gingivitis that include eugenol and thymol. Bacca shows oral compositions including thymol. Despite these disclosures, Bacca and Nabi do not cure the aforementioned deficiencies of Meeker.

Claims 1-9 and 36-41 are rejected as unpatentable over Meeker in view of Thakare. Thakare's extraction method, leads away from what is set forth in claim 36- 41, since ethanol is the extraction fluid. In other words, Thakare leads away from using an aqueous solution for maceration. Furthermore, it should be evident that Thakare and Meeker are not compatible teachings and therefore cannot be combined. Meeker is directed to essential oil sources of components. Thakare teaches ethanol extraction of components. The skilled artisan would have recognized that these teachings are incompatible with each other. Thus, this rejection is not sustainable.

Furthermore, Thakare published on July 16, 2004, which is after the priority date of March 29, 2004 for the present application. Applicant will perfect priority to the extent required by 37 C.F.R. 1.55 to antedate Thakare, if necessary.

For the reasons set forth above it is respectfully submitted that the section 103 rejections are traversed, and that the application is in condition of allowance.

Applicants respectfully request a three month extension of time for responding to the Office Action. The fee of \$555.00 for the extension is provided for in the charge authorization presented in the PTO Form 2038, Credit Card Payment form, provided herewith.

If there is any discrepancy between the fee(s) due and the fee payment authorized in the Credit Card Payment Form PTO-2038 or the Form PTO-2038 is missing or fee payment via the Form PTO-2038 cannot be processed, the USPTO is hereby authorized to charge any fee(s) or fee(s) deficiency or credit any excess payment to Deposit Account No. 10-1250.


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In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,

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